

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A variable communication system characterized by comprising:
a transmission device including information amount magnitude discrimination means for discriminating whether an amount of information to be transmitted per unit time is ~~relatively large~~
~~greater than~~ ~~or~~ ~~small~~ ~~less than a threshold amount~~, first communication data sending means for, when said information amount magnitude discrimination means discriminates that the amount of information to be transmitted is ~~relatively large~~ ~~a first amount~~, digitally modulating first information as the information into information in a signal form having a predetermined bandwidth with a predetermined center frequency, and sending out the information as communication data, and second communication data sending means for, when said information amount magnitude discrimination means discriminates that the amount of information to be transmitted is ~~relatively small~~ ~~a second amount~~, digitally modulating second information as the information upon performing spread spectrum to obtain the same bandwidth as the predetermined bandwidth with the center frequency, and sending out the information as the communication data, and
a reception device including demodulation means for demodulating the communication data sent from said transmission device, de-spreading appropriateness discrimination means for checking whether or not a signal after demodulation can be normally de-spread, first information reproduction means for, when said de-spreading appropriateness discrimination means

discriminates that de-spreading cannot be normally performed, reproducing the first information from the signal after demodulation by said demodulation means, de-spreading means for, when said de-spreading appropriateness discrimination means discriminates that de-spreading can be normally performed, de-spreading the signal after demodulation by said demodulation means, and second information reproduction means for reproducing the second information from the signal after de-spreading by said de-spreading means, and wherein the first amount is greater than the threshold amount and the second amount is less than a threshold amount.

2. (Currently Amended) A variable communication system according to claim 1, characterized in that

 said transmission device further comprises a transmission buffer which sequentially receives information to be transmitted and outputs the information in synchronism with a predetermined read clock, and

 said information amount magnitude discrimination means discriminates from an amount of information left in said transmission buffer whether the amount of information per unit time is relatively large or small a first or a second amount.

3. (Currently Amended) A variable communication system according to claim 2, characterized in that said first and second communication data sending means include chip clock generating means for outputting a chip clock having a predetermined frequency, transmitting-side frequency dividing means for frequency-dividing the chip clock output from said chip clock generating means at a predetermined frequency division ratio, read clock

selection means for, when said information amount magnitude discrimination means discriminates that information to be transmitted is relatively largea first amount, setting the chip clock as the read clock, and when said information amount magnitude discrimination means discriminates that information to be transmitted is relatively smalla second amount, setting, as the read clock, a clock obtained by frequency-dividing the chip clock by said transmitting-side frequency dividing means, spreading code generating means for receiving the chip clock and generating a spreading code, transmitting-side switch means which receives an output from said spreading code generating means and is turned on only when said information amount magnitude discrimination means discriminates that information to be transmitted is relatively smalla second amount, transmitting-side exclusive addition means for calculating exclusive-OR between information output from said transmission buffer in synchronism with the read clock and an output from said transmitting-side switch means, and modulation means for digitally modulating an output from said transmitting-side exclusive addition means and transmitting the output as the communication data.

4. (Currently Amended) A variable communication system according to claim 2, characterized in that said first and second communication data sending means include chip clock generating means for outputting a chip clock having a predetermined frequency, transmitting-side frequency dividing means for frequency-dividing the chip clock output from said chip clock generating means at a predetermined frequency division ratio, read clock selection means for, when said information amount magnitude discrimination means discriminates that information to be transmitted is relatively largea first amount, setting the chip

clock as the read clock, and when said information amount magnitude discrimination means discriminates that information to be transmitted is relatively small a second amount, setting, as the read clock, a clock obtained by frequency-dividing the chip clock by said transmitting-side frequency dividing means, modulation means for digitally modulating information output from said transmission buffer in synchronism with a read clock, spreading code generating means for receiving the chip clock and generating a spreading code, transmitting-side switch means which receives an output from said spreading code generating means and is turned on only when said information amount magnitude discrimination means discriminates that information to be transmitted is relatively small, transmitting-side exclusive addition means for calculating exclusive-OR between an output from said modulation means and an output from said transmitting-side switch means and transmitting the data as the communication data.

5. (Original) A variable communication system according to claim 3, characterized in that said de-spreading means and said first and second information reproduction means include reception clock generating means for outputting a reception clock identical to the chip clock, de-spreading code generating means for generating a de-spreading code on the basis of the reception clock output from said reception clock generating means, receiving-side switch means which receives an output from said de-spreading code generating means and is turned on only when said de-spreading appropriateness discrimination means discriminates that de-spreading can be performed, receiving-side exclusive addition means for calculating exclusive-OR between an output from said receiving-side switch means and a signal after demodulation by said demodulation means, receiving-side frequency dividing means for frequency-dividing the

reception clock at the predetermined frequency division ratio, write clock selection means for, when said de-spreading appropriateness discrimination means discriminates that de-spreading cannot be performed, selecting the reception clock, and when de-spreading appropriateness discrimination means discriminates that de-spreading can be performed, selecting and outputting a clock obtained by frequency-dividing the reception clock by using said receiving-side frequency dividing means, and a reception buffer in which an output from said receiving-side exclusive addition means is written as an input in accordance with the write clock selected by said write clock selection means, and data stored in said reception buffer is set as the information to be transmitted.

6. (Original) A variable communication system according to claim 5, characterized in that said reception clock generating means comprises reception clock reproduction means for reproducing a reception clock from communication data input to said demodulation means.

7. (Currently Amended) A variable communication system according to claim 2, characterized in that said information amount magnitude discrimination means sets a predetermined difference between a threshold by which it is discriminated that an information amount is relatively largea first amount and a threshold by which it is discriminated that an information amount is relatively smalla second amount.

8. (Currently Amended) A variable communication system according to claim 7, characterized in that said information amount magnitude discrimination means sets a threshold

by which it is discriminated that an information amount is ~~relatively large~~ first amount to a value larger than a threshold and by which it is discriminated that an information amount is ~~relatively small~~ second amount value smaller than the threshold.

9. (Original) A variable communication system according to claim 1, characterized in that said information amount magnitude discrimination means discriminates, depending on whether or not a path through which information to be transmitted is acquired is a pre-specified path, whether the amount of information to be transmitted per unit time is relatively large or small.

10. (Original) A variable communication system according to claim 1, characterized in that said information amount magnitude discrimination means discriminates, depending on whether or not a device which processes information to be transmitted is set in a pre-specified mode, whether the amount of information to be transmitted per unit time is relatively large or small.

11. (Original) A variable communication system according to claim 1, characterized in that said transmission device and said reception device comprise a radio device.

12. (Original) A variable communication system according to claim 1, characterized in that said transmission device outputs transmission power in proportion to a transmission rate.